

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An antenna polymer useful as a photocatalyst in aqueous medium, the polymer consisting essentially of a polymeric backbone of [[a]] at least one biodegradable water soluble polymer member selected from the group consisting of a natural polysaccharide, a chemically modified polysaccharide, and a water soluble derivate of a protein, and photoactive groups chemically bonded to the polymeric backbone, wherein said photoactive groups are polycyclic fused ring aromatic groups consisting of naphthalene.

Claim 2 (cancelled).

Claim 3 (currently amended): An antenna polymer according to claim 2, wherein said polysaccharide [[is]] comprises at least one member selected from the group consisting of starch, hydroxyethyl starch, dextran, hydroxymethyl cellulose and hydroxyethyl cellulose.

Claim 4 (cancelled).

Claim 5 (currently amended): An antenna polymer according to claim ~~[[4]]~~ 1, wherein said ~~[[is]]~~ polysaccharide comprises at least one member selected from the group consisting of chitosan, hyaluronic acid, amylopectin, alginates, xanthan and carrageenan.

Claim 6 (original): An antenna polymer according to claim 1, wherein said biodegradable water soluble polymer is polyvinyl alcohol.

Claims 7-8 (cancelled).

Claim 9 (currently amended): An antenna polymer according to any one of claims 1, 3 and ~~5-6~~ [[to 6]], containing from 1 to 30 mole% of photoactive groups.

Claim 10 (original): An antenna polymer according to claim 9, containing from 3 to 10 mole% of photoactive groups.

Claims 11-14 (cancelled).